



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,055	03/09/2005	Juha-Pekka Koskinen	59643.00585	4444
32294	7590	10/21/2005		
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER AJIBADE AKONAI, OLUMIDE	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/524,055	KOSKINEN ET AL.	
	Examiner	Art Unit	
	Olumide T. Ajibade-Akonai	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>02/08/2005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by **Raman et al (6,829,473)**.

Regarding **claim 1**, Raman et al discloses a method for charging for services in an IP based communication system, comprising: establishing an accounting session (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26) between a network element (home PDSN 178 or foreign PDSN 185, see figs. 12-14, col. 36, lines 13 and 23) and a charging function (HAAA 191 and BAAA 201, see figs. 12 and 14, col. 35, lines 59-67) for the session (prepaid call from a wireless node 78, see col. 36, lines 4-8); and initiating a change in the accounting session at the charging function (BAAA 201 uses alternative measure-method parameters to purchase new credits for the

Art Unit: 2686

prepaid service of PDSN 185, and this leads to a change in the usage rates for the credits in the prepaid call, see fig. 14, col. 38, lines 63).

Regarding **claim 2**, as applied to claim 1, Raman et al further discloses wherein the step of initiating a change in the accounting session comprises transmitting a request to update (652, see fig. 14, col. 38, lines 8-20 and 44-63) the accounting session (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26) from the charging function to the network element (PDSN 185 and BAAA 201 perform accounting procedures such as replenishing credits and purchasing new credits for prepaid services, see col. 38, lines 8-20).

Regarding **claim 3**, as applied to claim, Raman et al further discloses wherein the request is an update accounting request message (652, see fig. 14, col. 38, lines 8-20 and 44-63).

Regarding **claim 4**, as applied to claim 2, Raman et al further discloses wherein responsive to the request the network implements (PDSN 185, see fig. 14, col. 38, line 62) a change in the charging of the accounting session (see col. 38, lines 46-63).

Regarding **claim 5**, as applied to claim 2, Raman et al further discloses wherein the responsive to the request the network element (PDSN 178, see col. 36, line 17) transmits an acknowledgement (Auth-Accept message, 34) to the charging function (HAAA 191, see col. 36, line 27).

Regarding **claim 6**, as applied to claim 5, Raman et al further discloses wherein the acknowledgement is an update accounting acknowledge message (Auth-Accept message, 34-43).

Regarding **claim 7**, as applied to claim 1, Raman et al further discloses wherein the network element (home PDSN 178 or foreign PDSN 185, see figs. 12-14, col. 36, lines 13 and 23) is a controller of the communications session (see col. 35, lines 59-67).

Regarding **claim 8**, as applied to claim 1, Raman et al further discloses wherein the step of establishing an accounting session includes establishing an accounting session between the charging function (HAAA 191, see figs. 12-14) and a further network element (PDSN 185 sends a Diameter Auth-request to HAAA 9191, see figs. 12 and 13, col. 37, lines 30-40).

Regarding **claim 9**, as applied to claim 8, Raman et al further discloses establishing an accounting session between an application for the session (PDN 193, see fig. 12, col. 35, line 47) and the charging function (communications are exchanged between the PDN 193 and HAAA 191 using the Diameter protocol, see col. 35, lines 47-52).

Regarding **claim 10**, as applied to claim 8, Raman et al further discloses establishing an accounting session between a control function for the session (PCF 174 connected to home PDSN 178, see figs. 12-14, col. 36, line 13) and the charging function (PDSN 178 may directly communicate with HAAA 191, see fig. 12, col. 35, lines 59-67).

Regarding **claim 12**, as applied to claim 1, Raman et al further discloses wherein the accounting session is associated with a pre-paid charging function (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26).

Regarding **claim 13**, as applied to claim 1, Raman et al further discloses wherein the IP based communication system supports a Diameter IP protocol (Diameter protocol, see fig. 12, col. 35, lines 20-25, 43-52).

Regarding **claim 14**, Raman et al further discloses an element for monitoring charging in an IP based communication system (3G network 108, with PDSN 178 and 185, HAAA 191 and BAAA 201, see figs. 12 and 14, col. 35, lines 20-24 and lines 59-67), comprising; means for establishing an accounting session with an application (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26); means for informing a network element controlling an associated communication session of the accounting session (652, see fig. 14, col. 38, lines 8-20 and 44-63); and means for initiating a change in the accounting session (BAAA 201 uses alternative measure-method parameters to purchase new credits for the prepaid service of PDSN 185, and this leads to a change in the usage rates for the credits in the prepaid call, see fig. 14, col. 38, lines 63).

Art Unit: 2686

Regarding **claim 15**, as applied to claim 14, Raman et al further discloses wherein the means for initiating a change in the accounting session includes means for transmitting a request to update the accounting session (652, see fig. 14, col. 38, lines 8-20 and 44-63).

Regarding **claim 16**, as applied to claim 15, Raman et al further discloses wherein the request is an update accounting request message (652, see fig. 14, col. 38, lines 8-20 and 44-63).

Regarding **claim 17**, as applied to claim 15, Raman et al further discloses wherein a change in the charging of the accounting session is implemented in response to the request (see col. 38, lines 46-63).

Regarding **claim 18**, as applied to claim 15, Raman et al further discloses wherein the responsive to the request the network element (PDSN 178, see col. 36, line 17) transmits an acknowledgement (Auth-Accept message, 34) to the charging function (HAAA 191, see col. 36, line 27).

Regarding **claim 19**, as applied to claim 18, Raman et al further discloses wherein the acknowledgement is an update accounting acknowledge message (Auth-Accept message, 34-43).

Regarding **claim 20**, as applied to claim 14, Raman et al further discloses wherein the network element is a controller of the communications session (see col. 35, lines 59-67).

Regarding **claim 21**, as applied to claim 14, Raman et al further discloses wherein the communication system (3G network 108, see fig. 12, col. 35, lines

Art Unit: 2686

20-21) supports a Diameter IP protocol (Diameter protocol, see fig. 12, col. 35, lines 20-25, 43-52).

Regarding **claim 22**, as applied to claim 21, Raman et al further discloses wherein the means for initiating a change in the accounting session includes means for transmitting a request to update the accounting session (652, see fig. 14, col. 38, lines 8-20 and 44-63), and wherein the request signal is transferred using a Diameter IP protocol (Diameter Auth-Request, see col. Col. 38, lines 8-32).

Regarding **claim 23**, as applied to claim 21, Raman et al further discloses wherein responsive to the request the network element (PDSN 178, see col. 36, line 17) transmits an acknowledgement (Auth-Accept message, 34) to the charging function (HAAA 191, see col. 36, line 27), and wherein the acknowledgement signal is transferred using a Diameter IP protocol.

Regarding **claim 24**, Raman et al further discloses a communication system (3G network 108, with PDSN 178 and 185, HAAA 191 and BAAA 201, see figs. 12 and 14, col. 35, lines 20-24 and lines 59-67) in which charging for the provision of services is implemented in a session, the system comprising: a network element (home PDSN 178 or foreign PDSN 185, see figs. 12-14, col. 36, lines 13 and 23) for controlling the session; an application for the session; a control function for the session, and a charging function (HAAA 191 and BAAA 201, see figs. 12 and 14, col. 35, lines 59-67), wherein at least one accounting session is established between the charging function and at least one of the network element (a PPP 45 session is 182 is negotiated between the PDSN 178

Art Unit: 2686

and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26), the application (PDN 193, see fig. 12, col. 35, line 33) and the control function (PCF 174, see fig. 12, col. 35, line 28), wherein the charging function is adapted to initiate a change in the at least one accounting session (BAAA 201 uses alternative measure-method parameters to purchase new credits for the prepaid service of PDSN 185, and this leads to a change in the usage rates for the credits in the prepaid call, see fig. 14, col. 38, lines 63).

Regarding **claim 25**, as applied to claim 24, Raman et al further discloses wherein the charging is pre-paid charging (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26).

Regarding **claim 26**, as applied to claim 24, Raman et al further discloses wherein there is provided a plurality of accounting sessions (PDSN 178 can communicate with HAAA 191 and BAA 201), wherein the charging function (BAAA 201) initiates a change in one accounting session (a PPP 45 session is 182 is negotiated between the PDSN 178 and the wireless mobile node 78 for a pre-paid billing session, and an Auth-Request message is sent to the HAAA 191 or BAAA 201, see figs. 12 and 14, col. 36, lines 12-26) responsive to a change in another accounting session (BAAA perform accounting procedures such as replenishing credits and purchasing new credits for prepaid services, and the

Art Unit: 2686

measurement parameters that specifies each credit of the block of credit changes, see col. 38, lines 8-20, 46-63).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Menon et al (20040105413 discloses a system and method for tight inter-networking between wireless local area network (WLAN) and universal mode telecommunications system (UMTS).

Son et al (6,201,957) discloses a system and method for implementing flexible calling plans.

Kasteleweicz et al (20040147245) discloses a method for deducting for services provided in a computer network.

Ishikawa et al (6,343,284) discloses a method and system for billing on the internet.

Lundstrom (20020191597) discloses an association of charging between communication systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olumide T. Ajibade-Akonai whose telephone number is 571-272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-

Art Unit: 2686

7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OA

Marsha D. Banks-Harold
MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600